CHAPTER IV

RESEARCH RESULT

The survey of health status and related factors of elderly in Papayom District, Patthalung Province is the study in descriptive type at one particular period of time between 1-30 October 2004. It is in the form of survey research with the object to study health status and health behavior of elderly, accessibility of health services, and social support. Sampling group was from Thai population, 60 and over 60 years of age, who live in their household and could, communicated through speaking and hearing. Stratified-two-stage sampling was used with 350 persons. All the data was collected, representing from all of them for the equivalent to 100 percent. The materials consist of 5 sections: 1) General Interview Questionnaire on personal data, economic and social life.2) Interview Questionnaire on Health Behavior 3) Interview Questionnaire on Accessibility in Health Service 4) Interview Questionnaire on social support 5) Interview Questionnaire on Health status. The questionnaires were assessed on their reliability and accuracy of contents by experts. The assessment of validity was used with the 40 elderly with similar characteristics by using Cronbach alpha co-efficiency Test.

Each scale's reliability value was as follows:

1. Interview Questionnaire on Health Behavior 0.69

2. Interview Questionnaire on social support   0.72

3. Interview Questionnaire on Health status   0.79

Field data was collected by 4 public health officials. The data analysis was in descriptive form; frequency, percentage, average mean, standard deviation and time square (x^2)

Results

1. Personal data, economic and social life

As for personal data, economic and social life, it was found that the majority was female for: 66.6 percent at the age groups between 60 and 69(53.1 percent), being Buddhist for 98.9 percent, married for 63.1 percent with primary education at 83.6 percent and ability to read and write at 81.1 percent (Table 4.1)

Table 4.1: Number and Percent of personal factor (n=350)

Personal Factor	Male		Female		Total	
	N	%	N	%	N	%
Gender	117	33.4	233	66.6	350	100
Age group (Years)						
- 60 – 69	57	16.3	129	36.9	186	53.1
- 70 – 79	43	12.3	83	23.7	126	36
- 80 and over	17	4.9	21	6.0	38	10.9
Status						
- Married	94	26.9	127	36.3	221	63.1
- Separate/ Widow/ Divorce	21	6.1	102	29.2	122	35.2
- Single	2	0.6	4	11	6	17
Education level						
- Primary school	94	26.9	199	56.9	293	83.6
- No formal education	12	3.4	26	7.4	3.8	10.9
- Secondary school	3	0.9	5	1.4	8	2.3
- Vocational school	7	2.0	2	0.6	9	2.6
- Bachelor's school or higher	1	0.3	1	0.3	2	0.6
Reading and writing ability						
- Can read and write well	95	27.1	189	54	284	81.1
- Cannot read and write	13	3.7	27	7.8	40	11.4
- Can read and write a little	9	2.6	17	4.9	26	7.4
Religion						
- Buddhist	117	33.4	229	65.4	346	98.9
- Islam	0	0	4	1.1	4	1.1

From the study in economic area, it was found that the majority of the elderly was still working group (52.6percent), their occupation was in agriculture (61.9 percent). For nonworking group, it was found that the majority had health problems and was too old (41.3 percent). Source of their income was mostly from their children (52.7 percent), sufficient expense (45.7 percent) (Table 4.2)

Table 4.2: Number and Percent of economic factor (n=350)

Economic Factor	Male		Female		Total	
	N	%	N	%	N	%
Present work	64	34.9	119	65.0	183	52.6
- Agriculture	42	22.9	72	39.3	114	62.3
- Employer	16	8.7	19	10.4	35	19.1
- Trade	4	2.2	27	14.8	31	16.9
- Government	2	1.1	1	0.5	3	1.6
No career	53	31.7	114	68.3	167	47.4
Cause of not working						
- Age	23	13.8	46	27.5	69	41.3
- Health Problem	22	13.2	47	28.1	69	41.3
- Children's decision	6	3.7	19	11.4	25	14.9
- No work available	2	1.2	2	1.2	4	2.4
If you do not work; What is the source of income? (No career=47.4%) (n=167)						
- Children	28	16.7	60	35.9	88	52.7
- No receive	13	7.8	27	16.2	40	23.9
- Saving	7	6	19	11.4	26	15.6
- Parent	4	4.2	4	2.4	8	4.8
- Salary	1	0.6	1	0.6	2	1.2
- Spouse	0	0	3	1.8	3	1.8
Do you currently have and income? (n=350)						
- No	72	20.6	118	33.7	190	54.3
- Yes	45	12.9	115	32.9	160	45.7

From social area, it was found that the majority lived with their spouse (74.9

percent), lived alone (21.1percent), good relationship with family (92.31percent) and the

majority did not require any care-givers (73.71percent). (Table 4.3)

Table 4.3:   Number and Percent of social factor (n=350)

Social factor	Male		Female		Total	
	N	%	N	%	N	%
Whom do you live with?						
- Spouse or children	105	30	157	44.9	262	74.9
- Alone	10	2.9	64	18.3	74	21.1
- Relative	2	0.6	12	3.4	14	4
Family communication						
- Live happy together	108	30.9	215	61.4	323	92.3
- Live together but don't associate	8	2.3	17	4.9	25	7.1
- Live together but have problem	1	0.3	1	0.3	2	0.6
Do you need assistance during your daily life?						
- No	81	23.1	177	50.6	258	73.7
- Yes	36	10.3	56	16.0	92	26.3

Other data such as longevity, morbidity and mortality of the elderly parents in

Papayom District, Patthalung Province, it was found that males over 80 years old

(37.4percent), females were 80 years old (55.1percent), the majority with natural death

(52.6percent and 49.7 percent respectively) (Table 4.4)

Table 4.4:   Number and Percent of parents separated by age at death and cause of death (n=350)

Characteristic	Number	%
Age at death of father		
- 30-59	36	20.9%
- 60-69	63	18%
- 70-79	83	23.7%
- 80 and over	131	37.4%
Cause of death of father		
- Age	184	52.6%
- Unknown disease	82	23.4%
- Accident	18	5.1%
- Carcinoma	10	2.9%
- Gastrointestinal disease (GI disease)	9	2.6%
- Lung disease	9	2.6
- Palsy	6	1.7%
- Hearth disease	6	1.7%
- Suicide	3	0.9
- Diabetes mellitus	1	0.3%
- Urinary tract disease	1	0.3%
Age at death of mother		
- 25-59	61	17.4%
- 60-69	33	9.5%
- 70-79	63	18%
- 80 and over	193	55.1%
Cause of death of mother		
- Age	174	49.7%
- Unknown disease	64	18.3%
- Lung disease	60	1.1%
- Carcinoma	11	3.1%
- Uterus disease	9	2.6%
- Accident	6	1.7%
- Gastrointestinal disease (GI disease)	6	1.7%
- Palsy	4	1.1%
- Hearth disease	2	0.6%

The study found that the average life of males was 71.8 years of age and females 77.6years of age. (Table 4.5)

Table 4.5:   Number and Percent of average parents' age at death (n=350) (95%CI)

Characteristic	Average of Life (Years)	Min	Max	S.D.
Age at death of father	71.8	30	104	16.9
Age at death of mother	77.6	25	105	18.6

2. Health behavior of the elderly

The study found that their eating behavior was appropriate drinking water 6-8 cups a day regularly (88.9percent), eating regularly and fresh fruits regularly (88.6percent), eating 3 meals-a-day regularly (84.9percent). As for their physical activities, it was found that the activity from work regularly (73.1percent). As for recreational activity, it was found that the majority in social gatherings (80percent) and regular physical check up (38.6percent) (Table 4.6)

Table 4.6:   Number and Percent of level of Health behaviors (n=350)

Activity	Regularly		Sometime		Never	
	N	%	N	%	N	%
1. How often do you drink and eat?						
1.1 Milk	142	40.6	135	38.6	73	20.9
1.2 Ovultin, Milo	115	32.9	150	42.9	85	24.3
1.3 Orange juice	59	16.9	172	49.1	119	34
1.4 Coffee	28	8	81	23.1	241	68.9
1.5 Tea	20	5.7	70	20	260	74.3
1.6 Eat 3 meal a day	297	84.9	50	14.3	3	0.9
1.7 Eat fatty meat and fatty food	75	21.4	218	62.3	57	16.3
1.8 Eat fermented or picked food	31	7.7	121	34.6	202	57.7
1.9 Eat fresh foods and vegetables	310	88.6	34	9.7	6	1.7
1.10 Drink 6-8 cups of water per day	311	88.9	39	11.1	0	0
2.Physical activity						
How often do you do these Physical activities?						
2.1 Walking, aerobics, Tygag, etc	190	54.3	115	32.9	45	12.9
2.2 Exercise for 30 minutes each day and work up a sweat	194	55.4	111	32.3	43	12.3
2.3 Activities that require physical exertion	256	73.1	65	18.6	29	8.3
2.4 Exercise at least 3 times a week for 30 minutes each time	235	67.1	84	24	31	8.9
3. Prevent behavior						
How often do you avoid the following harmful habits?						
3.1 Drinking coffee or tea	39	11.1	50	14.3	261	74.6
3.2 Drinking beer, alcohol, wine, etc.	13	3.7	45	12.9	292	83.4
3.3 Cigarette smoking	31	8.9	30	8.6	289	82.6
3.4 Pipe inhalation	8	2.3	9	2.6	333	95.1

Table 4.6: (Cont.) Number and Percent of level of Health behaviors (n=350)

Activity	Regularly		Sometime		Never	
	N	%	N	%	N	%
4. Stress Management						
How often do you do the following to						
manage your stress level?						
4.1 Meet socially with friends on a regular basis	280	80	45	12.9	25	7.1
4.2 Do meditation	119	34	160	45.7	71	20.3
4.3 Get upset or annoyed by people around you	39	11.1	196	56.0	115	32.9
4.4 You are kind and caring to your family	248	70.9	71	20.3	31	8.9
4.5 Pray before going to bed	202	57.7	104	29.9	44	12.6
4.6 Before going to sleep, do you fret or worry about things in your life.	48	13.7	189	54	113	32.3
5. Physical examination						
How often do you have your regular check up?	135	8.6	135	38.6	80	22.9

3. Social support

The study found that the elderly participating is society (82.9percent), receiving respectability (76percent), receiving health supports (73.7percent), receiving household chores supports (68percent), receiving advisers (64percent) and receiving news and other information (57.4percent). (Table 4.7)

Table 4.7: Number and Percent of level of social support (n=350)

Activity	Regularly		Sometime		Never	
	N	%	N	%	N	%
1. Receive monetary assistance from family	138	39.4	105	30	107	30.6
2. Receive help with decisions from your family	181	51.7	135	38.6	34	9.7
3. Receive help with daily household chores	238	68	77	22	35	10
4. Receive help with medications or doctor's appointments when sick	258	73.7	74	22.1	18	5.1
5. Receive knowledge or information concerning health matters	201	57.4	123	35.1	26	7.4
6. Receive assistance in the from of counseling or decision making	148	42.3	153	43.7	49	14
7. Receive support when you are depressed or upset	138	39.4	153	43.7	59	16.9
8. Receive praise and respect considering your age	266	76	72	20.6	12	3.4
9. Receive advice about your work or your social environment	224	64	100	28.6	26	7.4
10. Do what is appropriate for your age	290	82.9	48	13.7	12	3.4

4. Accessibility of Health service

The study found that within the period of 3 months, there were sick elderly at 52 percent with mild illness at 45.1 percent. The medical welfare benefit was utilized are gold card 73.6 percent. The accessibility to the services was in the form of hired vehicles at 44.4 percent and took less than 30 minutes at 51.4 percent. The expenses were between Bath 30 and Bath49 or 43.9 percent. In view of the expectation from the services, it was found that the satisfaction was up to 96.9 percent.

In case of mild illness, the elderly used the services from state hospital up to 46.9 percent and from health district centers at 38 percent. As for service illness, the elderly used the services from state hospital at 84.4 percent. (Table 4.8)

Table 4.8:   Number and Percent of accessibility of health service (n=350)

No.	Information of health accessibility	Number	%
1.	**During the past 3 months (1July-30 September 2004) were you ill, or did you obtain any health care? (Yes –number answer number2 (cont.)**		
	- Illness	182	52
	- Not illness	168	48
2.	**The level of illness (as envisioned by patient)(n=182)**		
	- Severe and not able to work	29	15.9
	- Moderate and can return to work	71	39.0
	- Mild	82	45.1
3.	**Mode of transportation from your home to the health care unit: (n=350)**		
	- Walk	32	9.1
	- Bus	45	12.9
	- Hired vehicle (Taxi)	145	41.4
	- Personal car/ motorcycle	128	36.6
4.	**Time spent traveling to health center (round trip in minutes) (n=350)**		
	- < 30	180	51.4
	- 30-59	117	33.5
	- >60	53	15.1
	Mean = 27.18, S.D.=17.23, Min=8 minutes, Max =80 minutes		
5.	**Cost of traveling (baht) (n=350)**		
	- <30	102	29.1
	- 30-49	154	43.9
	- 50^+	94	26.9
	Mean=46.8, S.D. =70.3, Min 10 Baht, Max 1,200 Baht		
6.	**Were your expectations, regarding the health service, fulfilled? (n=350)**		
	- Fulfilled	339	96.9
	- Not Fulfilled	11	3.1

Table 4.8: (Cont.) Number and Percent of accessibility of health service (n=350)

No.	Information of health accessibility	Number	%
7.	**Indicate your first choice of a health facility when you are mildly ill from the list below. Indicate your reason for selecting this health care provider/unit (n=350)**		
	- Primary health care centers	133	38
	- Over the counter medication	12	3.4
	- Government hospital	164	46.9
	- Private clinic or hospital	10	2.9
	- Traditional Medical Practitioner	3	0.9
	- Health Volunteer	5	1.4
8.	**Indicate your first choice of a health facility when you are severely ill from the list below. Indicate your reason for selecting this health care provider/unit (n=350)**		
	- Primary health care centers	31	8.9
	- Over the counter medication	2	0.6
	- Government hospital	297	84.9
	- Private clinic or hospital	14	4
	- Traditional Medical Practitioner	4	1.1
	- Health Volunteer	2	0.6
9.	**Method of payment / Type of coverage for service (Insurance used when ill) (n=230)**		
	- Gold card (non-co-payment)	172	74.7
	- Self's Insurance	3	1.4
	- Children's insurance	43	18.7
	- Wanted to co- payment	12	5.2
	(Elderly can answer for 1-4 Time) average (mean) 1.3		

5. Health status of the elderly

The study found that the elderly perceived themselves that they were healthy (47.1percent), average (31.4percent) and weak (21.4percent), there were group discussion and counseling within the families communities for 88 percent. The level of good and warm relationship with family was 94 percent, participation in society at 93.1 percent and good mental health at 94.6percent. The ability to walk and balance themselves at 85.1 percent and the ability to take care of themselves at 95.4 percent.

As for the problems in physical function, they could not chew food at 44.9percent, ability to see, to have regular bowel movements and to regularly urinate at 47.7percent, 19.1percent and 11.4percent respectively. As for hearing, they had problems listening and hearing at 18percent and for sleeping problem, they could sleep only at 24.3percent.

As for the environments, they could live in a proper home at 97.4percent without any harmful pollution at 87.4percent and safety for their life and property at 85.1percent respectively. (Table4.9)

Table 4.9: Number and Percent of health status level (n=350)

Health status	Normal		Abnormal	
	Number	%	Number	%
1. How is your health today?				
- Healthy	165	47.1		
- Not healthy but can work	110	31.4		
- Not healthy and cannot work	50	14.3		
- Not healthy and can't work	25	7.2		
2. You ever ask your family or members of your community for help.	316	88.6	40	11.4
3. Your family is generally a close-knit family	329	94	21	6
4. You participate in social activities or functions.	326	93.1	24	6.9
5. You can walk and balance well without support	298	85.1	52	14.9
6. You can take care of yourself, without help from family or friends, on a daily basis.	334	95.4	16	4.6
7. You can chew and eat regularly	193	55.1	157	44.9
8. You have a toilet available and you use it	339	96.9	11	3.1
9. You have adequate home and living conditions	341	97.4	9	2.6
10. The status of your mental health	331	94.6	19	5.4
11. You feel your surroundings are healthy for you	306	87.4	44	12.6
12. Your surroundings without noise, dust, smells, etc.	298	85.1	52	14.9
13. Do you have problems with your eyesight?	183	52.3	167	47.7
14. Do you have regular bowel movements?	283	80.9	67	19.1
15. Do you regular urinate?	310	88.6	40	11.4
16. Is your hearing normal?	287	82	63	18
17. Do you sleep well at night?	265	75.7	85	24.3
18. Do you have any chronic diseases that need regular treatment?	191	54.6	159	45.4

The study of the health status of body mass index at normal level and abnormal

level i.e. over weight and under weight (58.9percent, 20.3percent and 20.9percent)

(Table 4.9)

Table 4.9:   (Cont.) Number and Percent of health status level (n=350)

Health status	Normal		Abnormal			
	Number (N)	%	Over Weight (N)	%	Lower Weight (N)	%
19. Body Mass Index (BMI)	206	58.9	71	20.3	73	20.9

The student found that the elderly were sick of backache and pain in the waist of

46.3 percent, hypertension at 17.2 percent, diabetes mellitus 8.3 percent and finally

palsy at 4.2 percent (Table 4.10)

Table 4.10: Number and Percent of elderly separate by type of illness (n=191)

Type of illness	Number	%
1. Hearth disease	16	8.3
2. Diabetes mellitus	25	13.0
3. Hypertension	33	17.2
4. Carcinoma	1	0.5
5. Palsy	8	4.2
6. Thyroid	3	1.6
7. Allergy; Common cold	16	8.3
8. Myalgia; Back pain, waist pain	89	46.3

Elderly can answer for 1 disease (N0.1-7 is chronic disease, No.9 is acute disease

6. Relationships between personal factor, economic factor & social factor and health status of the elderly at Papayom District.

6.1 The relationships between the personal factor and health status of the elderly showed that is respect of age group, reading /writing ability and level of education, the statistically significant level 0.05 the best health status was 42.6 percent. In view of education, it was found that the majority group with completed primary level maintained good health status at 62.3percent and the elderly with good reading/writing ability maintained good health status at 63.4 percent. (Table 4.11)

Table 4.11: Relationships between personal factor and health status of the elderly

Personal factor	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
1. Gender							4.425	2	0.109
Male	1	0.3	40	11.4	76	21.7			
Female	2	0.6	55	15.7	176	50.3			
2. Age group (Year)							38.650	4	0.000*
60-69	0	0	37	10.6	149	42.6			
70-79	2	0.6	33	9.4	91	26.0			
80 and over	1	0.3	25	7.1	12	3.4			
3. Status							10.400	8	0.238
Single	0	0	3	0.9	3	0.9			
Married	1	0.3	53	15.1	167	47.7			
Separate/ Divorce / Widow	2	0.6	39	11.1	82	23.4			

Table 4.11: (Cont.) Relationships between personal factor and health status of the elderly

Personal factor	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
4. Reading and writing ability							38.579	4	0.000*
Can read and write well	1	0.3	61	17.4	222	63.4			
Cannot read or write	2	0.6	17	4.9	21	6.0			
Can read and write a little	0	0	17	4.9	9	2.6			
5. Education level							21.220	8	0.007*
No formal education	2	0.6	18	5.1	18	5.1			
Primary school	1	0.3	74	21.1	218	62.3			
Secondary school or Vocational school	0	0	3	0.9	14	4.0			
Bachelor's degree or higher	0	0	2	0.6	2	0.6			

* Statistically Significant level 0.05

6.2 Relationships between economic factor and health status of elderly. The study found from the relationships between economic factor relating to occupations, the sufficiency of income, and types of jobs and the health status of elderly in term of the statistically significant level 0.05 that the elderly who were still working maintained better health status the elderly without working at 42.8percent and 29.1percent respectively. The elderly who were in agriculture and fishery secters maintained

good health status at 51.6percent. In view of sufficiency of income, it was found that the elderly with sufficient income for their living maintained better health status than the elderly without sufficient income at 36.6percent and 35.4percent respectively. (Table 4.12)

Table 4.12: Relationships between economic factor and health status of the elderly

Economic factor	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
1. Present working							21.591	8	0.006*
Still working	0	0	34	9.7	150	42.8			
Without working	3	0.9	61	17.4	102	29.1			
2. Types of jobs							22.643	12	0.031*
Agriculture and fishery sectors	0	0	19	103	95	51.6			
Laborer	0	0	10	5.4	25	13.6			
Self employed	0	0	5	2.7	27	14.7			
Government or state enterprise	0	0	0	0	3	1.6			
3. In view of income level							6.15	2	0.000*
without sufficient income	0	0	36	10.3	124	35.4			
with sufficient income	3	0.9	59	16.9	128	36.6			

* Statistically Significant level 0.05

6.3 Relationships between social factor and health status of elderly

The study from the relationships between the social factor relating to dependency on daily caregivers and relationship with the family members and the health status of elderly in term of the statistically significant level 0.05 that the elderly who did not depend on the daily assistance maintained better health status than the elderly who depended on the daily assistance at 61.1 percent and 10.9 percent respectively. As for the elderly with good relationship is the family maintained good health status at 67.4 percent. (Table 4.13)

Table 4.13: Relationships between social factor and health status of the elderly

Social factor	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
1. You live with							9.880	4	0.467
Alone	1	0.3	21	6.0	52	14.9			
Spouse or children	1	0.3	68	19.4	193	55.1			
Relatives	1	0.3	6	1.7	1.7	2.0			
2. You need assistance during your daily life							58.545	2	0.000*
No	1	0.3	43	12.3	214	61.1			
Yes	2	0.3	52	14.9	38	10.9			
3. Your relationship with your family							62.708	4	0.000*
Live happy together	1	0.3	86	24.6	236	67.4			
Live together but don't associate	1	0.3	8	2.3	16	4.6			
Live together but have problems	1	0.3	1	0.3	0	0			

* Statistically Significant level 0.05

7. Relationships between health behavior and health status of the elderly

The study found from the relationships between health behavior factor and health status of the elderly in term of the statistically significant level 0.05 that the elderly with average level of health behavior maintained the beat health status at 64.6 percent. (Table 4.14)

Table 4.14: Relationships between health behavior and health status of the elderly

Health behavior	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%	28.944	4	0.000*
1.Low level (0-24)	3	0.9	17	4.9	21	6.0			
2.Moderate level (25-50)	0	0	76	26.7	226	64.6			
3.High level (>50)	0	0	2	0.6	5	1.4			

* Statistically Significant level 0.05

8. Relationships between types of illness and body mass index of the elderly

The study found from the relationships between types of illness and body mass index of the elderly in term of the statistically significant level 0.05 that the groups with chronic disease had mass body index at normal level for 32.9 percent, over BMI 32.9 percent and lower BMI at 5.2 percent. (Table 4.15)

Table 4.15: Relationships between types of illness and health status of the elderly

Health behavior	Normal BMI		Over BMI		Lower BMI		x^2	df	p-value
	N	%	N	%	N	%	32.183	18	0.021*
1.Chronic disease	63	32.9	29	15.2	10	5.2			
2.Acute disease	51	26.7	13	6.8	25	13.1			

*Statistically Significant level 0.05

9. Relationships between social support and health status of the elderly

The study found from the relationships between social support factor and health status of the elderly in term of the statistically significant level 0.05 that the elderly with good social supports maintained good level of health status at 66.7 percent. (Table4.16)

Table 4.16: Relationships between social support and health status of the elderly

Social support	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%	229.747	36	0.000*
1. Low level (0-10)	0	0	0	0	0	0			
2.Moderate level (11-20)	3	0.9	14	4.1	22	6.4			
3.High level (21-30)	0	0	81	23.5	230	66.7			

* Statistically Significant level 0.05

10. Relationships between accessibility of health service and health status of the elderly

The study found that the illness, degrees of illness and choices in using health services were related with the health status of the elderly in term of the statistically significant level 0.05 .It showed that elderly without any illnesses had good level of health status at 38.6 percent whereas the elderly with illness had level of health status at 36.6percent. In choosing health welfare benefits, the elderly would use golden card the most at 44.8 percent. (Table 4.17)

Table 4.17: Relationships between accessibility of health service and health status of the elderly

Accessibility of health service	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
Were you Illness?							12.599	2	0.002*
Illness	3	0.9	62	17.7	117	33.4			
Not illness	0	0	33	9.4	135	38.6			
Health level (n=183)							65.231	6	.000*
Severe and not able to work	3	1.6	18	9.8	8	4.4			
Moderate and can return to work	0	0	27	14.5	44	24.04			
Mild	0	0	16	8.7	67	36.6			
Health facility of choice when mildly ill) (n=350)							5.631	12	.934
Family health care center or government hospital	1	.3	42	12	121	34.6			
Primary health care center in the community	2	.6	38	10.9	93	26.6			
Private or Hospital	0	0	4	1.1	6	1.7			
Over the counter medication	0	0	2	.6	10	2.9			
Traditional Medical Practitioner	0	0	2	.6	1	.3			
Health Volunteer	0	0	6	1.7	17	4.9			

Table 4.17: (Cont.) Relationships between accessibility of health service and health status of the elderly

Accessibility of health service	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
Health facility of choice when severely ill) (n=350)							3.730	10	.959
Family health care center or government hospital	3	.9	80	22.9	214	61.1			
Primary health care center in the community	0	0	10	2.9	21	6			
Private or Hospital	0	0	4	1.1	10	2.9			
Over the counter medication	0	0	0	0	2	.6			
Traditional Medical Practitioner	0	0	1	.3	1	.3			
Health Volunteer	0	0	0	0	4	1.1			
Method of payment/ Type of coverage for service (230Times)							15.725	8	.046*
Golden card	3	1.4	66	28.6	103	44.8			
Self's insurance	0	0	0	0	3	1.4			
Children 's insurance	0	0	14	6.1	29	12.6			
Wanted to co-payment	1	0.4	4	1.7	7	3.0			

Table 4.17: (Cont.) Relationships between accessibility of health service and health status of the elderly

Accessibility of health service	Level of health status at low (Not good) (0-7)		Level of health status at moderate (8-15)		Level of health status at high (Good) (16-21)		x^2	df	p-value
	N	%	N	%	N	%			
Mode of transportation from your home to the health care unit:							5.665	6	.462
Bus	0	0	14	4	31	8.9			
Hired vehicle	1	.3	44	12.6	100	28.6			
Walk	1	.3	5	1.4	26	7.4			
Personal car/Motorcycle	1	.3	32	9.1	95	27.1			
Time spent traveling to health center (round trip in minutes) (n=350)							30.811	32	.527
<30	2	.6	36	10.3	135	38.7			
30-59	1	.3	12	3.5	14	4.1			
>60	0	0	16	4.6	37	10.6			
Cost of traveling (round trip in Baht) (n=350)							46.585	40	.220
<30	0	0	39	11.2	135	38.6			
30-49	3	0.9	17	4.9	62	17.7			
49$^+$	0	0	39	11	55	15.7			
Expectation in health care service							.563	2	.754
Fulfilled	3	0.9	91	26	245	70			
Not Fulfilled	0	0	4	1.1	7	2			

* Statistically Significant level 0.05

11. Relationships between gender and health behavior

It was found that genders related with health behaviors of elderly in term of the statistically significant level 0.05. The majority of female elderly maintained good health behavior at average level at 60 percent (Table 4.18)

Table 4.18: Relationships between gender and health behavior

Gender	Level of health status at low (Not good) (0-25)		Level of health status at moderate (26-50)		Level of health status at high (Good) (51-75)		x^2	df	p-value
	N	%	N	%	N	%	10.077	2	.006*
Male	20	5.7	92	26.3	5	1.4			
Female	21	6	210	60	2	0.6			

*Statistically Significant level 0.05

12. Relationships between gender and body mass index (BMI)

It was found that genders were not related with body mass index in term of the of the statistically significant level 0.05. The majority was female gender with body mass index at normal weight 39.7percent and abnormal weight being over weight 14percent and under weight 12.9 percent (Table 4.19)

Table 4.19: Relationships between gender and body mass index (BMI)

Gender	Normal BMI		Over BMI		Lower BMI		x^2	df	p-value
	N	%	N	%	N	%	1.063	2	.588
Male	67	19.1	22	6.3	28	8.0			
Female	139	39.7	49	14.0	45	12.9			

* Statistically Significant level 0.05